REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

EPA ID: TND980844229 Site Name: HOOKER ROAD BRIDGE DUMP

Page 1 of 1

State ID:

| Alias Site Names: HO | OKER ROAD BRID | DGE DUMP | | · |
|--|---|---|-------------------------|--|
| City: CHATTANOOGA | • | County or Parish: HAMILTON | · ' | State: TN |
| Refer to Report Dated: | 03/28/2006 | Report Type: SITE REASSES | SMENT 001 | |
| Report Developed by: | STATE | | | |
| DECISION: | | | | |
| 1. Further Rem because: | edial Site Assess | sment under CERCLA (Superfund) is | s not required | |
| ズ 1a. Site doe (No Further | es not qualify for t Remedial Action | further remedial site assessment ur Planned - NFRAP) | nder CERCLA | |
| ☐ 1b. Site ma | y qualify for actio | n, but is deferred to: | | |
| 2. Further Asse | essment Needed l | Jnder CERCLA: | | • . |
| 2a. Priority: | : Higher | Lower | | |
| 2b. Other: | (recommended ad | ction) NFRAP (No Futher Remedial A | Action Planned | |
| DISCUSSION/RATION | ALE: | | | |
| | | that received fire-damaged material from Dy-Th Site. Today, part of the property has an active | | |
| There are homes and schools | to the south and north | west, within 2000 feet of the Site. | | |
| | ce. There are no know | at the Site. Residences and businesses within in drinking water wells within a 4-mile radius of | | |
| There is no surface water inta | ke within the 15-mile se | egment. | | |
| The nearest house is 50 feet a Not enough targets or concen | | line of the Site. It is possible for trespassers to athway. | enter the Site from the | e southern or western side. |
| | aving a Greenway built | FRAPd. However, there is known contamination along the Creek. If this were to happen, it is possible. | | |
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| | | | BREAK: | -\\\ |
| | | | OTHER: | |
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| • | | | | |
| | | | | |
| Site Decision Made/bv: | BETH WALDEN | | | 1000 100 |
| Site Decision Made by: Signature: | 5Walden | (printed 9/12/06) | • | Date: 07/12/2006 |



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Remediation 4th Floor, L &C Annex 401 Church Street Nashville, Tennessee 37243-1538

SITE: HODER RO BREAK: 1.8 OTHER: 1.1

March 29, 2006

Beth Walden
Site Assessment Project Officer
U.S. Environmental Protection Agency
Region 4
61 Forsyth Street S.W.
Atlanta, GA 30303-8909

Dear Beth:

Enclosed is the Reassessment Report for the Hooker Road Bridge Dump site in Chattanooga, TN. DOR staff is not recommending further CERCLIS investigation at this site. Future action could possibly include removal dependent upon surrounding land use.

If you need additional information or have any questions, please contact me at (615) 532-0925.

Sincerely,

Suzanne Wilkes

Division of Remediation

ine Wilkes

Recommend NFRAP ClyBWalder 4/12/06

CERCLA SITE REASSESSMENT HOOKER ROAD BRIDGE DUMP CHATTANOOGA, HAMILTON COUNTY, TENNESSEE TND 980844229

SITE: HOOKER ROOD
BREAK: 1.3
OTHER:

March 28, 2006

TENNESSEE DIVISION OF REMEDIATION CHATTANOOGA ENVIRONMENTAL FIELD OFFICE

Rrepared by

Jeb Barrett, P.G.

Geologist 3

Reviewed by

Penny Johnston, P.E.

EPS 4

Approved by

Beth Walden, RPM

EPA Region IV

TABLE OF CONTENTS

| 1.0 | Introduction1 |
|--------|-------------------------------------|
| 2.0 | Site History1 |
| 3.0 | Analytical Results5 |
| 4.0 | Discussion of Pathways |
| | 4.1 Groundwater Pathway5 |
| | 4.2 Surface Water Pathway6 |
| | 4.3 Soil Exposure and Air Pathways6 |
| 5.0 | Site Score8 |
| 6.0 | Summary and Conclusions8 |
| | FIGURES |
| Figure | · |
| Figure | · |
| Figure | |
| | APPENDICIES |

Appendix A Quickscore Sheets Appendix B References

1.0 Introduction

EPA has tasked the Tennessee Department of Environment and Conservation Division of Remediation to reassess several CERCLA sites using the new HRS Quickscore Program. These are sites that previously did not score high enough to be on the National Priorities List when scored with the Prescreen Program. The Hooker Road Bridge Dump is one of these sites.

2.0 Site History

2.1 Site History

In 1978 a local citizen claimed there was an illegal chemical dump on the site and called the Tennessee Division of Water Pollution Control (WPC). WPC observed that they had been to the site in 1976 after the City of Chattanooga informed them that a hauler had dumped fire-damaged material from Dy-Therm Chemical on the site, after a fire destroyed their warehouse. It was reported that the hauler emptied the drums of "aromatic waste" and then took the drums and sold them for scrap. Several large bales of synthetic carpet fiber waste, 3-55 gallon drums, various construction and industrial waste, and some household garbage were observed at the time. During the 1978 visit, it was observed that the site had been set on fire and most of the waste that was on site burned leaving a charcoal like residue on the ground (Reference 1).

The current owner of the site is Ora Powell (Reference 2). Ms. Powell is the daughter of Willie Powell, the owner of the property during the time of dumping. In interviews with Mr. Powell, he stated that he was not aware of any chemicals that were dumped on the site.

TDEC Division of Superfund Staff performed a Site Investigation (SI) in 1988. During the investigation Dieldrin, Polynuclear Aromatic Hydrocarbons (PAHs), and Nickel were found at the site at levels above Region IX Industrial PRGs. At the time, only a small number of samples were collected to attempt to characterize some of the waste at the site. The SI analytical results are presented in Section 3. Because of a lack of targets at the site, the site score was only 5.7. However, the direct contact scored a 50.0 (Reference 1, pg. 9).

The site is being reconsidered with more appropriate future use scenarios and reevaluated from a removal standpoint. Contamination is likely to still be present at the site and additional characterization is needed.

In 1988 and today, the northern quarter of the site is being operated as D&D Salvage, an auto salvage yard. This salvage yard is on top of approximately 10' of fill. The fill is reported to contain foundry sands and has not been sampled (Reference 1). The salvage yard is typical in that it has the standard associated untidiness, stains and sheens on the ground, etc., that normally is found in such settings. The current operator of the salvage yard is Dennis Goins (Reference 2).

2.2 Site Setting

The geographic coordinates for the site are 34° 59' 24" N Latitude and 85° 18' 00" W Longitude (Figure 1). The site is between Hooker Road on the north and Stateline Road on the south and bordered on the west by Chattanooga Creek and its tributary, Dye Branch. To the east of the site is another auto salvage yard. The auto salvage yard on the site is approximately one quarter of the 22 total acres in size. The dump area with the drums and carpet bales is the southern three quarters of the site (Figure 2).

There are homes and schools to the south and the northwest, within 2000 feet of the site. In the other directions, the area is either commercial or undeveloped. The site can be divided into two distinct sections, the north quarter is an open lot used as an auto salvage yard on top of 10' of fill, and the south three quarters is a large wooded tract that lies within the floodplain of Chattanooga Creek and Dye Branch. The waste piles and drums are in the southern wooded portion. The eastern portion of the site is divided from the other salvage yard by a fence in disrepair. All along this fence, on both sides, are piles of auto parts and random debris (Reference 1). There is also a fence along Hooker road, but there is no restriction to access along the western or southern portions of the property (Figure 2).

The site lies within the Valley and Ridge Province of East Tennessee. The site lies in a valley of low relief between two prominent ridges known as Hawkins Ridge to the west and Missionary Ridge to the east. Relief in the site vicinity is approximately 20 feet or less as the floodplain is very flat lying along this section of Chattanooga Creek (Figure 1).

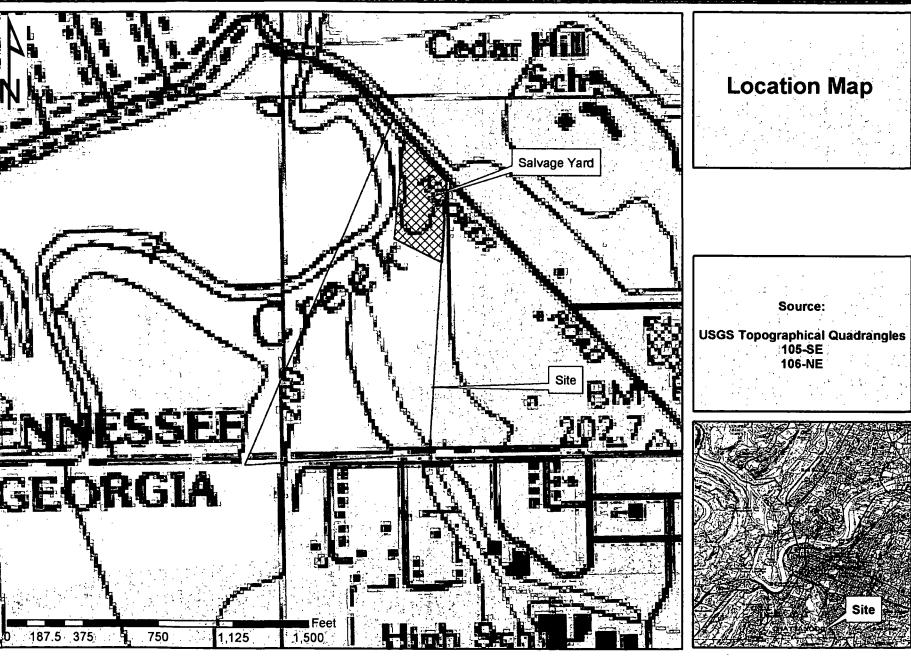
From Reference 1:

The site is underlain by a group of rocks known as the Ordovician-Cambrian Knox Group, Undifferentiated. This group is characterized by coarse-grained, thin to thick bedded, and weathers to cherty rubble.

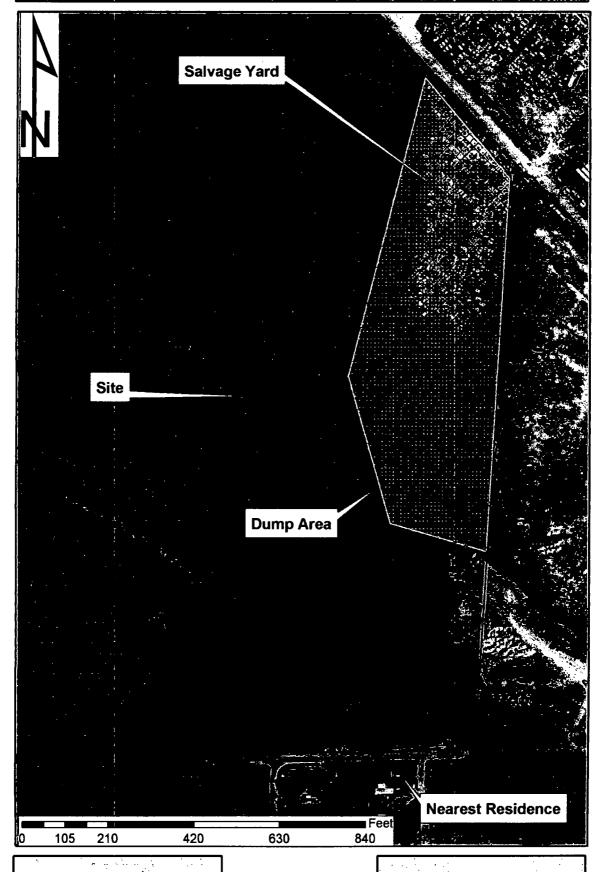
The Thickness is considered to be approximately 2600 feet thick. The Knox in the immediate vicinity of the site is mapped as a long narrow outcrop striking in a north-south direction that is controlled by thrust faults. Since relief is low, formation boundaries are not as distinguishable and hence the area is mapped as a group.

A major thrust fault known as the Chattanooga Fault lies approximately 1200 feet to the west of the site. This fault trends in a north-south direction and semi parallel to other major thrust faults in East Tennessee. To the east the next major fault is the Missionary Ridge Fault, which lies approximately 1.5 miles away. However, the area is complex and it is possible that less prominent thrusts are between this region the control of which is not well understood at present.

Figure 1







Site Map

Source: USGS 2002 Aerial Photos The prominent unconsolidated material underlying the site is alluvium. It is not known to be an important source of groundwater probably due to its thin nature. However, groundwater in units of the Knox Group can be quite substantial with yields of 100 gpm or more. The availability of groundwater in these limestones and dolomites is primarily dependent on the distribution of fractures and the amount of solutionally enlarged zones. Predicting the yield of a well is difficult because the distribution of such conduits is very often erratic. This is possibly due to the siliceous nature of some of the Knox units. In the vicinity of the site it is believed that water is transmitted very readily in the Knox because just to the north there is an area of obvious sinkholes.

3.0 Analytical Results

Below are the results from sampling conducted by TDEC in February 1988.

| Analyte | | Sample Numbers | | | | | | | | | | |
|--------------------|-------|----------------|-------|-------|---------------|---------------|---------|--------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Barium | 96.2 | | | 107 | | | 19.1 | | | 79.4 | | |
| Cadmium | 1.4 | | | 1.5 | | | 2.3 | | | 1.3 | | |
| Chromium | 65 | | | 80 | | | 9 | | | 34 | | |
| Copper | 46 | | | 78 | | | 23 | | | 37 | | |
| Lead | 163 | | | 101 | | | 15 | | | 76 | | |
| Mercury | 0.198 | | | 0.104 | | | ND | | | 0.130 | | · |
| Nickel | 25 | | | 1167 | | | 137,200 | | | 1118 | | |
| Selenium | 1.0 | | | ND | | | 1.6 | | | 0.2 | | |
| Silver | 0.9 | | | 0.7 | | | 0.4 | | | 0.6 | | |
| Zinc | 215 | | | 177 | | | 43.4 | | | 102 | | |
| 4,4-DDE | | | 8.44 | | | 3.6 | | | ND | | | 5.23 |
| Dieldrin | | | 424 | | | 32.4 | | | ND | | | 13.6 |
| Anthracene | | | 379 | | | ND | | | ND | | | ND |
| Benzo(a)Pyrene | | | 384 | | | ND | | | ND | | | ND |
| Benzo(ghi)perylene | | | 851 | | | ND | | | ND | | | ND |
| Fluoranthene | | | 1100 | | | ND | | | ND | | | ND |
| Phenanthrene | | | 376 | | | ND | | i | ND | | | ND |
| Chysene | | | 43 | | | ND | | | ND | | | ND |
| Trichloroethylene | | ND | | | 0.0699 | | | 0.0982 | | | 0.115 | , i |
| Detection units | mg/kg | μg/kg | μg/kg | mg/kg | μ g/kg | μ g/kg | mg/kg | μg/kg | μg/kg | mg/kg | μg/kg | μg/kg |

| | Sample Descriptions | | | | | |
|-----------------|---|--|--|--|--|--|
| Sample 1,2,3 | Soil Background | | | | | |
| Sample 4,5,6 | Soil composite around drums | | | | | |
| Sample 7,8,9 | Waste from drum | | | | | |
| Sample 10,11,12 | Soil composite near burned carpet bales | | | | | |

4.0 Discussion of Pathways

4.1 Groundwater Pathway

There has been no known sampling of the groundwater at the site. Residences and businesses within a 4-mile radius of the site receive their drinking water from a public utility source (Reference 3). There are no known drinking water wells within the 4-mile radius of the site (Reference 4). Therefore, the groundwater pathway at the site does not receive a higher HRS score.

It is possible that the groundwater under the site does have some level of contamination. Historical interviews suggest that dumping of a liquid with a "moth ball" odor occurred at the site (Reference 1). Sampling in 1988 showed levels of Dieldrin at the site to be 0.424 mg/kg (Reference 1), which is above the Region IX PRG Karst Dilution Attenuation Factor of 0.0002 mg/kg. The amount and extent of any potential contamination in the groundwater is not known due to a lack of analytical data.

4.2 Surface Water Pathway

The contamination lies within the floodplain of Chattanooga Creek. Adequate sediment sampling has not occurred at the site to determine if contamination of Dry Branch and Chattanooga Creek has occurred. EPA Superfund lists Chattanooga Creek as a site on the National Priorities List. As part of the investigation of Chattanooga Creek, several sediment samples have been taken downstream of the site. These samples were non-detect for Dieldrin, but did have numerous detections of PAHs. However, the PAHs detected have been associated with contamination from sites linked with the Chattanooga Creek Superfund Site (Reference 3, pgs. 6-25). The reach of Chattanooga Creek nearest to the site was cleaned up as part of an EPA Emergency Action in 1999-2000, but the floodplain in the vicinity of the site has not had any remediation completed on it.

There is a large pond to the west of the property and 600 feet from the dumping area (Figure 2). It is likely that locals use this pond for fishing. There has been no known sampling of this pond.

There is no surface water intake located within the 15-mile downstream segment (Figure 3).

The average flow of the Tennessee River is 36,650 cfs, and the average flow of the Chattanooga Creek is 125 cfs. The Tennessee River is used as an industrial and drinking water supply. It is used for fishing, recreation, and irrigation, and it is a water source for livestock and wildlife (Reference 1). Chattanooga Creek has been heavily polluted by local industrial activity and is currently on CERCLIS. Chattanooga creek is a posted creek and a NPL site. There are approximately 16,000 feet of National Wetlands Inventory wetlands along the Chattanooga Creek down gradient from the Site.

4.3 Soil Exposure and Air Pathways

There are no residents on the site. The nearest house is 50 feet away from the property line to the south of the site. The site is heavily wooded and has a fence on the north and east sides. It is possible for trespassers to enter the site from the southern or western side. Aerial photos show that there is a road on the southern portion of the property leading to a pond that borders the property to the west. This road can allow easy access to the site. It is likely that people are using

Figure 3



Surface Water Pathway

Source: USGS Topographical Quadrangles: 105-SE 106-NE this road to get to the pond and fish. The auto salvage yard on site employs an average of 5 persons.

The population for the City of Chattanooga is 155,554, according to the 2000 census data (Reference 5). Population projections for the surrounding community performed by the Chattanooga-Hamilton County Regional Planning Commission was 7,676, for the year 2000 (Reference 1).

Because of the nature of the contamination and the location, the Air Pathway has not been evaluated.

5.0 Site Score

| Ground Water Migration Pathway Score | 0.05 |
|---------------------------------------|------|
| Surface Water Migration Pathway Score | 7.27 |
| Soil Exposure Pathway Score | 7.30 |
| Air Migration Pathway Score | 0.00 |
| | |
| Site Score | 5.15 |

6.0 Summary and Conclusions

Based on the score, the Tennessee Department of Environment and Conservation, Division of Remediation recommends this site be removed from EPA's CERCLA list. However, there is known contamination at this site. The total amount of contamination is not known. Future use scenarios for Chattanooga Creek include having a Greenway built along the creek. If this were to happen, it is possible that children and/or trespassers could find their way onto the site more frequently. Therefore, the site should be looked at from a removal standpoint.

APPENDIX A

Quickscore Sheets

**** CONFIDENTIAL **** ****PRE-DECISIONAL DOCUMENT **** **** SUMMARY SCORESHEET **** **** FOR COMPUTING PROJECTED HRS SCORE ****

**** Do Not Cite or Quote ****

Site Name: Hooker Road Bridge Dump

Region: IV

Chattanooga, Hamiton, TN

Evaluator: Jeb Barrett

EPA ID#: TND 980844229

Date: March 8, 2006

Lat/Long: 34° 59' 24" N, 85° 18' 00" W

T/R/S:

Congressional District:

This Scoresheet is for: Reassessment of the Site

Scenario Name:

Description:

| | S pathway | S ² pathway |
|--|--|------------------------|
| Ground Water Migration Pathway Score (Sgw) | 0.05 | 0.0025 |
| Surface Water Migration Pathway Score (S _{sw}) | 7.27 | 52.8529 |
| Soil Exposure Pathway Score (S _s) | 7.3 | 53.29 |
| Air Migration Score (Sa) | 0 | 0 |
| $S^{2}_{gw} + S^{2}_{sw} + S^{2}_{s} + S^{2}_{a}$ | 10000000000000000000000000000000000000 | 106.1454 |
| $(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$ | | 26.53635 |
| $/(S_{gw}^2 + S_{sw}^2 + S_{s}^2 + S_{a}^2)/4$ | | 5.15 |

υ Pathways not assigned a score (explain):

| Table 3-1 Ground Water Migration Pathwa | Factor categories and factors Maximum Value Value Assigned | | | | | |
|--|--|------|-----------------------|--|--|--|
| Aguifer Evaluated: | waximum value | valu | ie Assigneu | | | |
| idulier Evaluated. Likelihood of Release to an Aquifer: | | | | | | |
| 1. Observed Release | 550 | 0 | | | | |
| 2. Potential to Release: | 000 | • | | | | |
| 2a. Containment | 10 | 10 | | | | |
| 2b. Net Precipitation | 10 | 6 | | | | |
| 2c. Depth to Aquifer | 5 | 3 | | | | |
| 2d. Travel Time | 35 | 35 | | | | |
| 2e. Potential to Release [lines 2a(2b + 2c + 2d)] | 500 | 440 | | | | |
| 3. Likelihood of Release (higher of lines 1 and 2e) | 550 | | 440 | | | |
| Naste Characteristics: | 000 | | | | | |
| 4. Toxicity/Mobility | (a) | 20 | | | | |
| 5. Hazardous Waste Quantity | (a) | 1 | | | | |
| 6. Waste Characteristics | 100 | • | 2 | | | |
| Targets: | | | _ | | | |
| 7. Nearest Well | (b) | 0 | | | | |
| 8. Population: | (-) | - | | | | |
| 8a. Level I Concentrations | (b) | 0 | | | | |
| 8b. Level II Concentrations | (b) | 0 | | | | |
| 8c. Potential Contamination | (b) | 0 | | | | |
| 8d. Population (lines 8a + 8b + 8c) | . (b) | 0 | | | | |
| 9. Resources | 5 | 5 | | | | |
| 10. Wellhead Protection Area | 20 | 0 | | | | |
| 11. Targets (lines 7 + 8d + 9 + 10) | (b) | | 5 | | | |
| Ground Water Migration Score for an Aquifer: | · · · | | | | | |
| 12. Aquifer Score [(lines 3 x 6 x 11)/82,5000] ^c | 100 | | 0.0533333333 33333 | | | |
| Ground Water Migration Pathway Score: | | | | | | |
| 13. Pathway Score (S _{gw}), (highest value from line 12 for all aquifers evaluated) ^c | 100 | | 0.0533333333 33333 | | | |

^a Maximum value applies to waste characteristics category ^b Maximum value not applicable ^c Do not round to nearest integer

| Factor categories and factors | Maximum Value | Value As | signed |
|---|------------------|-----------|-------------|
| Vatershed Evaluated: | Value | | |
| Drinking Water Threat | | | |
| Likelihood of Release: | | • | |
| 1. Observed Release | 550 | 0 | |
| 2. Potential to Release by Overland Flow: | 40 | 40 | |
| 2a. Containment | 10 | 10 | |
| 2b. Runoff | 10 | 1 | |
| 2c. Distance to Surface Water | 5 25 | 25 | |
| 2d. Potential to Release by Overland Flow [lines 2a(2b + 2c)] | 35 | 260 | |
| 3.Potential to Release by Flood: | 40 | 40 | |
| 3a. Containment (Flood) | 10 | 10 | |
| 3b. Flood Frequency | 50 500 | 50 | |
| 3c. Potential to Release by Flood (lines 3a x 3b) | 500 500 | 500 | |
| 4. Potential to Release (lines 2d + 3c, subject to a maximum of 500) | 500 550 | 500 | ^ |
| 5. Likelihood of Release (higher of lines 1 and 4) | 550 | | 0 |
| Waste Characteristics: | /a\ | 40000 | |
| 6. Toxicity/Persistence | (a) | 10000 | |
| 7. Hazardous Waste Quantity | (a) | . 1 | 4.0 |
| 8. Waste Characteristics | 100 | | 10 |
| Targets: | 5 0 | • | |
| 9. Nearest Intake | 50 | 0 | |
| 10. Population: | /L \ | | |
| 10a. Level I Concentrations | (b) | | |
| 10b. Level II Concentrations | (b) | 0 | |
| 10c. Potential Contamination | (b) | 0 | |
| 10d. Population (lines 10a + 10b + 10c) | (b) | 0 | |
| 11. Resources | 5 | 5 | _ |
| 12. Targets (lines 9 + 10d + 11) | (b) | | 5 |
| Drinking Water Threat Score: | 100 | | 0.3 |
| 13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100] Human Food Chain Threat | 100 | | U.c |
| Likelihood of Release: | | | |
| 14. Likelihood of Release (same value as line 5) | 550 | | 500 |
| Waste Characteristics: | | | |
| 15. Toxicity/Persistence/Bioaccumulation | (a) | 500000000 | |
| 16. Hazardous Waste Quantity | (a) | 1 | |
| 17. Waste Characteristics | 1000 | | 100 |
| Targets: | | | |
| 18. Food Chain Individual | 50 | 10 | |
| 19. Population | | | |
| 19a. Level I Concentration | (b) | | |
| 19b. Level II Concentration | (b) | | |
| 19c. Potential Human Food Chain Contamination | (b) | 3E-6 | |
| 19d. Population (lines 19a + 19b + 19c) | (b) | 0 | |
| 20. Targets (lines 18 + 19d) | (b) | | 10 |
| Human Food Chain Threat Score: | | | |
| 21. Human Food Chain Threat Score [(lines 14x17x20)/82500, subject to max of 100] Environmental Threat | 100 | | 6.0 |
| Likelihood of Release: | | | |
| 22. Likelihood of Release (same value as line 5) | 550 | | 500 |
| Vaste Characteristics: | | | |
| 23. Ecosystem Toxicity/Persistence/Bioaccumulation | (a) | 500000000 | |
| 24. Hazardous Waste Quantity | (a) | 1 | |
| 25. Waste Characteristics | 1000 | | 100 |

Targets:

| 26. Sensitive Environments | | | |
|---|-----|-----|------|
| 26a. Level I Concentrations | (b) | · | |
| 26b. Level II Concentrations | (b) | | |
| 26c. Potential Contamination | (b) | 1.5 | |
| 26d. Sensitive Environments (lines 26a + 26b + 26c) | (b) | 1.5 | |
| 27. Targets (value from line 26d) | (b) | | 1.5 |
| Environmental Threat Score: | | | |
| 28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60] | 60 | | 0.91 |
| Surface Water Overland/Flood Migration Component Score for a Watershed | | | |
| 29. Watershed Score ^c (lines 13+21+28, subject to a max of 100) | 100 | | 7.27 |
| Surface Water Overland/Flood Migration Component Score | | | - |
| 30. Component Score (S _{sw}) ^c (highest score from line 29 for all watersheds evaluated) | 100 | | 7.27 |

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c Do not round to nearest integer

| TABLE 4-25 —GROUND WATER TO SURFACE WATER MIGRATION C | | | Assigned |
|--|---------------|---------|------------------------|
| Factor categories and factors | Maximum Value | value | Assigned |
| quifer Evaluated: Drinking Water Threat | | | |
| Likelihood of Release to an Aquifer: | | | |
| 1. Observed Release | 550 | 0 | |
| 2. Potential to Release: | 550 | U | |
| | 40 | 40 | |
| 2a. Containment | 10 | 10 | |
| 2b. Net Precipitation | 10 | 6 | |
| 2c. Depth to Aquifer | 5 | 3 | |
| 2d. Travel Time | 35 500 | 35 | |
| 2e. Potential to Release [lines 2a(2b + 2c + 2d)] | 500 | 440 | 440 |
| 3. Likelihood of Release (higher of lines 1 and 2e) | 550 | | 440 |
| Vaste Characteristics: | | | |
| 4. Toxicity/Mobility | (a) | 20 | |
| 5. Hazardous Waste Quantity | (a) | 1 | _ |
| 6. Waste Characteristics | 100 | | 2 |
| Targets: | | _ | |
| 7. Nearest Well | (b) | 0 | |
| 8. Population: | | | |
| 8a. Level I Concentrations | (b) | | |
| 8b. Level II Concentrations | (b) | | |
| 8c. Potential Contamination | (b) | 0 | |
| 8d. Population (lines 8a + 8b + 8c) | (p) | 0 | |
| 9. Resources | 5 | 5 | |
| 10. Targets (lines 7 + 8d + 9) | (b) | 5 | |
| Drinking Water Threat Score: | | | |
| 11. Drinking Water Threat Score ([lines 3 x 6 x 10]/82,500, subject to max of 100) | 100 | | 0.053333333 3333333 |
| Human Food Chain Threat | | | |
| likelihood of Release: | | | |
| 12. Likelihood of Release (same value as line 3) | 550 | | 440 |
| Naste Characteristics: | | | - |
| 13. Toxicity/Mobility/Persistence/Bioaccumulation | (a) | 1000000 | |
| 14. Hazardous Waste Quantity | (a) | 1 | |
| 15. Waste Characteristics | 1000 | | 32 |
| Cargets: | | | |
| 16. Food Chain Individual | 50 | | |
| 17. Population | | | |
| 17a. Level I Concentration | (b) | | |
| 17b. Level II Concentration | (b) | | |
| 17c. Potential Human Food Chain Contamination | (b) | 3E-6 | |
| 17d. Population (lines 17a + 17b + 17c) | (b) | 0 | |
| 18. Targets (lines 16 + 17d) | (b) | | 10 |
| Human Food Chain Threat Score: | | | |
| 19. Human Food Chain Threat Score [(lines 12x15x18)/82,500,suject to max of 100] | 100 | | 1.706666666 |
| Environmental Threat | | | 66667 |
| ikelihood of Release: | | | |
| 20. Likelihood of Release (same value as line 3) | 550 | | 440 |
| Naste Characteristics: | 500 | | 770 |
| 21. Ecosystem Toxicity/Persistence/Bioaccumulation | (a) | 1000000 | |
| 22. Hazardous Waste Quantity | (a) | 1 | |
| · | (a) 1000 | , | 22 |
| 23. Waste Characteristics | 1000 | | 32 |
| argets: | | | |
| 24. Sensitive Environments | ALX. | | |
| 24a. Level I Concentrations | (b) | | |

| 24b. Level II Concentrations | (b) | | |
|---|-----|-----|------|
| 24c. Potential Contamination | (b) | 1.5 | |
| 24d. Sensitive Environments (lines 24a + 24b + 24c) | (b) | 1.5 | |
| 25. Targets (value from line 24d) | (b) | | 1.5 |
| Environmental Threat Score: | . • | | |
| 26. Environmental Threat Score [(lines 20x23x25)/82,500 subject to a max of 60] | 60 | | 0.26 |
| Ground Water to Surface Water Migration Component Score for a Watershed | | | |
| 27. Watershed Score ^c (lines 11 + 19 + 28, subject to a max of 100) | 100 | | 2.02 |
| 28. Component Score (S _{gs}) ^c (highest score from line 27 for all watersheds evaluated, | 100 | | 2.02 |
| subject to a max of 100) | | | |

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c Do not round to nearest integer

| TABLE 5-1 SOIL EXPOSURE PATH | | V-les- | Assissad |
|---|---------------|--------|----------|
| Factor categories and factors | Maximum Value | value | Assigned |
| ikelihood of Exposure: | 550 | | 550 |
| 1. Likelihood of Exposure | 550 | | 550 |
| Waste Characteristics: | , , | | |
| 2. Toxicity | (a) | 10000 | |
| Hazardous Waste Quantity | (a) | 1 | |
| 4. Waste Characteristics | 100 | | 10 |
| Targets: | | | |
| 5. Resident Individual | 50 | 0 | |
| 6. Resident Population: | | | |
| 6a. Level I Concentrations | (b) | 0 | |
| 6b. Level II Concentrations | (b) | 0 | |
| 6c. Population (lines 6a + 6b) | (b) | 0 | |
| 7. Workers | 15 | 5 | |
| 8. Resources | 5 | 5 | |
| Terrestrial Sensitive Environments | (c) | 25 | |
| 10. Targets (lines 5 + 6c + 7 + 8 + 9) | (b) | | 35 |
| Resident Population Threat Score | | | |
| 11. Resident Population Threat Score (lines 1 x 4 x 10) | (b) | | 192500 |
| Nearby Population Threat | | | |
| Likelihood of Exposure: | | | |
| 12. Attractiveness/Accessibility | 100 | 50 | |
| 13. Area of Contamination | 100 | 5 | |
| 14. Likelihood of Exposure | 500 | | . 5 |
| Waste Characteristics: | | | |
| 15. Toxicity | (a) | 10000 | |
| 16. Hazardous Waste Quantity | (a) | 1 | |
| 17. Waste Characteristics | 100 | | 10 |
| Targets: | | | |
| 18. Nearby Individual | 1 | 1 | |
| 19. Population Within 1 Mile | (b) | 7676 | |
| 20. Targets (lines 18 + 19) | (b) | | 8191 |
| Nearby Population Threat Score | • • | | |
| 21. Nearby Population Threat (lines 14 x 17 x 20) | (b) | | 409550 |
| Soil Exposure Pathway Score: | ` ' | | |
| 22. Pathway Scored (S _s), [lines (11+21)/82,500, subject to max of 100] | 100 | | 7.3 |

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60
d Do not round to nearest integer

| TABLE 6-1AIR MIGRATIO | N PATHWAY SCORESHEET | | | |
|--|----------------------|---------|---------|--|
| Factor categories and factors | Maximum Value | Value A | ssigned | |
| ikelihood of Release: | | | | |
| 1. Observed Release | 550 | . 0 | | |
| 2. Potential to Release: | | | | |
| 2a. Gas Potential to Release | 500 | | | |
| 2b. Particulate Potential to Release | 500 | | | |
| 2c. Potential to Release (higher of lines 2a and 2b) | 500 | | • | |
| 3. Likelihood of Release (higher of lines 1 and 2c) | 550 | | 0 | |
| Waste Characteristics: | | | | |
| 4. Toxicity/Mobility | (a) | | | |
| 5. Hazardous Waste Quantity | (a) | | | |
| 6. Waste Characteristics | 100 | | | |
| Targets: | | | | |
| 7. Nearest Individual | 50 | | | |
| 8. Population: | | | | |
| 8a. Level I Concentrations | (b) | | | |
| 8b. Level II Concentrations | (b) | | | |
| 8c. Potential Contamination | (c) | | | |
| 8d. Population (lines 8a + 8b + 8c) | (b) | | | |
| 9. Resources | 5 | | | |
| 10. Sensitive Environments: | | | | |
| 10a. Actual Contamination | (c) | | | |
| 10b. Potential Contamination | (c) | | | |
| 10c. Sensitive Environments (lines 10a + 10b) | (c) | | | |
| 11. Targets (lines 7 + 8d + 9 + 10c) | (b) | | | |
| Air Migration Pathway Score: | | | | |
| 12. Pathway Score (S _a) [(lines 3 x 6 x 11)/82,500] ^d | 100 | | 0 | |

^a Maximum value applies to waste characteristics category
^b Maximum value not applicable
^cNo specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.
^d Do not round to nearest integer

APPENDIX B

References

REFERENCES

- 1. Site Inspection Report for the Hooker Road Bridge Dump, TN980844229, State of Tennessee, Department of Environment and Conservation, Division of Superfund, February 24, 1988.
- 2. Hooker Road Bridge Dump Field Notes, State of Tennessee, Department of Environment and Conservation, Division of Remediation, Site Number 33-590. February 3, 2006.
- 3. Remedial Investigation Report for the Tennessee Products Site, Chattanooga, TN. CDM Federal Programs Corporation, March 4, 1999.
- 4. Records of Water Wells on the Chattanooga Quadrangle 0105SE TN, State of Tennessee, Department of Environment and Conservation, Division of Water Supply, December 5, 2005.
- 5. US Census Bureau, State and County QuickFacts for Chattanooga, Tennessee. *People QuickFacts Population, 2000* obtained from http://quickfacts.census.gov/qfd/states/47/4714000.html.

Reference 1

Site Inspection Report

Hooker Road Bridge Dump, TN980844229

State of Tennessee, Department of Environment and Conservation

Division of Superfund

February 24, 1988



Potential Hazardous Waste Site

Site Inspection Report

HOOKER ROAD BRIDGE DUMP o TND 980844229 Chattanooga, Hamilton County, Tennessee

Reference 2

Hooker Road Bridge Dump Field Notes
State of Tennessee
Department of Environment and Conservation
Division of Remediation
Site Number 33-590
February 3, 2006.

33-590 HOOKER ROMO Dunp 2/3/06 1420 - Ool ONS TO - S. RAPPETT , T. KOTTH DOR THICKING WITH CHERENT BUSINESS OPERATOR. CURRENT (JEB 13(4) ORAPONEZE - OUNER - LICES DANGE DENNIS GOWS-CHERT CEASER DVD ANTO 595-1132 5176 15 CHRRISTLY BEING UDED AS AN ANTO SALVAGE YARD. D+D SALVAGE. DENNIS GOIN STATED THEY HAVE BUEN OPERATION FOR > BMCNTHS FILLED YPAER (NORTHERSTURY) PORTION OF THE SIRE CLUMPED OF VEGETATION AND HAS CARS ON POULS OF WAREN WITH SHOEN BACK OF PROPERTY LOUS DOUN IN ELEVATION. THE CUNT -> P6 82

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| 1530 | DEPAR | 7,57 | 25 | | |
| · | • • | 27/10 | | , N | |
| | | | | | |

Site Name: Hooker Road Dump Location: Chattanooga, Tennessee DOR Personnel Present: J. Barrett, T. Keith

Site No. 33-590 Date: 2-03-06

Document Prepared By: J. Barrens



Photo 1. View of tires and debris. Photo taken by J. Barrett.

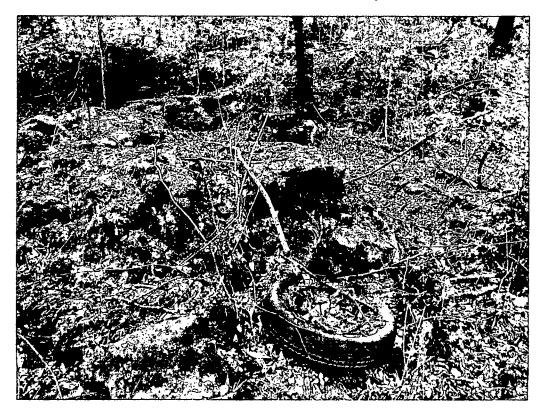


Photo 2. View of view of carpet backing. Photo taken by J. Barrett.

Site Name: Hooker Road Dump Location: Chattanooga, Tennessee DOR Personnel Present: J. Barrett, T. Keith Site No. 33-590 Date: 2-03-06

Document Prepared By: J. Barren



Photo 3. View of old drums that are in the same location and condition as described in the SI. Photo taken by J. Barrett.



Photo 4. View of black organic material found near old drums. Photo taken by J. Barrett.

Reference 3

Remedial Investigation Report for the Tennessee Products Site Chattanooga, TN CDM Federal Programs Corporation March 4, 1999

REMEDIAL PLANNING ACTIVITIES AT SELECTED UNCONTROLLED HAZARDOUS SUBSTANCES DISPOSAL SITES FOR EPA REGION IV

U.S. EPA CONTRACT NO. 68-W9-0056

WORK ASSIGNMENT NO.: 64-4LBV

REMEDIAL INVESTIGATION REPORT FOR THE TENNESSEE PRODUCTS SITE CHATTANOOGA, TENNESSEE

VOLUME I

DOCUMENT CONTROL NO.: 7740-064-RT-BTWP

MARCH 4, 1999

Prepared for: U.S. Environmental Protection Agency

Prepared By:
CDM Federal Programs Corporation
2030 Powers Ferry Road, Suite 490
Atlanta, Georgia 30339

Reference 4

Records of Water Wells on the Chattanooga Quadrangle 0105SE TN State of Tennessee, Department of Environment and Conservation Division of Water Supply December 5, 2005



| • | | · | | • | | | | | | | |
|------------|-------------|----------------------|------------|-----------|------------|-----------|-------------|-------------|-----------|------|-------------|
| QUAD / NTH | WELL NUM | OWNER'S NAME | COMP DATE | TOT DEPTH | TOT YIELD | CSE DEPTH | WELL FINISH | WAT QUAL | LATITUDE | A/C | DRILLER |
| COUNTY | REG NUM | LOCATION ROAD | INSP DATE | AQ DEPTH | STAT LEVEL | CSE TYPE | INTERVAL | INSP NUMBER | LONGITUDE | LOG | USE |
| 0105SE 1 | 06501147 | GUEST, BILL | 05/03/1985 | 85 | 20 | . 68 | Slotted | | 350500 | | 572 |
| HAMILTON | | SUTT CREEK | | 70 | • | Steel | 64 - 85 | | 852000 | No . | Residential |
| 0105SE 1 | 06501215 | MALONE, JIM | 11/13/1985 | 512 | 10 | 21 | Open Hole | | 350500 | | 84 |
| HAMILTON | | HIDDEN BROOK DR | | 69 | 50 | | 21 - 512 | | 852000 | No | Residential |
| 0105SE 1 | 06501242 | HEYWOOD I, BARRETT H | 05/20/1986 | 428 | 20 | 230 | Open Hole | | 350500 | , | 84 |
| HAMILTON | | FALMOUTH | ** | 323 | 200 | Steel | 230 - 428 | | 852000 | No | Heat Pump |
| 0105SE 1 | 06501463 | LAMONS, DANNY | 09/27/1987 | 105 | 20 | 52 | Open Hole | | 350500 | | 84 |
| HAMILTON | | RIVER CANYON | | 105 | 10 | Steel | 52 - 105 | | 852000 | No | Residential |
| 0105SE 1 | 20005461 | GARRETT, BOB | 02/17/2000 | 400 | 15 | 135 | Open Hole | | 350642 | s | 665 |
| HAMILTON | D0016033 | 1917 HWY 27 | 10/26/2000 | 352 | | Steel | 135 - 400 | 030084 | 852147 | Yes | Residential |
| 0105SE 1 | 20011425 | MILLS, THOM | 04/03/2001 | 95 | 2.5 | 37 | Open Hole | Clear | | 1 | 572 |
| HAMILTON | D0052819 | HWY 27 | | 78 | 40 | Steel | 37 - 95 | | | Yes | Residential |
| 0105SE 1 | 20033742 | UTC BIOLOGY DEPT. | 11/28/2003 | 310 | 50 | 63 | Open Hole | Clear | | | 571 |
| HAMILTON | D0062572 | CASH CANYON RD. | | 303 | 118 | Steel | 63 - 310 |) | | Yes | Other |
| 0105SE 1 | 91003165 | REDMOND, DORTHY | 08/27/1991 | 172 | 100 | 47 | Open Hole | Sulphur | | | 571 |
| HAMILTON | · | HWY 27 | | 65 | 39 | Steel | 47 - 172 | 2 | | No | Residential |
| 0105SE 1 | 92003531 | REECE, BOB | 09/29/1992 | . 64 | 50 | 41 | Slotted | | | | 68 |
| HAMILTON | | HWY 27 | | 45 | - 20 | Steel | 42 - 60 |) , , | · | No | Residential |
| 0105SE 1 | 92003532 | PARSON, WALTER | 09/29/1992 | 64 | 25 | 52 | Open Hole | | ` | | 68 |
| HAMILTON | | HWY 27 | | 45 | 25 | Steel | 52 - 64 | . | | No | Residential |
| 0105SE 1 | 93003393 | PARKER, DWIGHT | 07/27/1993 | 162 | 10 | 30 | Open Hole | Good | . , | | 571 |
| HAMILTON | | HWY 27 | | 25 | 25 | Steel | 30 - 162 | · | | No | Residential |
| 0105SE 1 | 95003312 | FRANKLIN, HENRY | 07/06/1995 | 142 | 35 | . 53 | Open Hole | Sulphur | | | 571 |
| HAMILTON | D0011747 | SUCK CREEK | · | 122 | 15 | Steel | 53 - 14 | 2 | | No | Residential |
| 0105SE 1 | | MORRIS JR, REX | 10/17/1995 | 350 | 4 | | - | | | | 572 |
| HAMILTON | | MILL CREEK | | 290 | | • | - | _ | | No | Other |



| QUAD / NTH COUNTY | WELL NUM REG NUM | OWNER'S NAME LOCATION ROAD | COMP DATE | TOT DEPTH | TOT YIELD STAT LEVEL | CSE DEPTH CSE TYPE | WELL FINISH | WAT QUAL INSP NUMBER | LATITUDE LONGITUDE | A/C LOG | DRILLER USE |
|-------------------|---------------------|-------------------------------|--------------|-----------|-------------------------|-----------------------|--|-------------------------|---------------------------------------|-------------|----------------|
| 0105SE 1 | 96001752 | JONES, KATE | 04/22/1996 | 165 | 10 | 60 | Open Hole | | | | 6 |
| HAMILTON | D0018132 | HIGHDOWN COURT | 0 11221 1000 | 70 | 50 | Steel | • | | | No - | Irrigation |
| 0105SE 1 | 97001079 | GARRETT, BOB | 04/11/1997 | 260 | 10 | 155 | Open Hole | Good | | | 571 |
| HAMILTON | D0021676 | HWY 27 | | 120 | 182 | Steel | 155 - 260 | | · | No | Residential |
| 0105SE 1 | 98000969 | GARRETT, ROBERT N | 03/13/1998 | 100 | | 83 | Open Hole | | - | | 712 |
| HAMILTON | D0026101 | 1917 SUCKCREEK | | 90 | 20 | Steel | 83 - 90 | | | No | Residential |
| 0105SE 1 | 99000117 | DONAHUE, GLEN | 12/01/1998 | 100 | 38 | 83 | Slotted | | -, | | 572 |
| HAMILTON ' | D0028542 | RIVER CANYON | | 83 | 20 | Steel | 79 - 100 | | | No | Residential |
| 0105SE 1 | 99000715 | TOWNSON, JEFF | 02/04/1999 | 252 | 100 | 70 | Open Hole | • | | | 665 |
| HAMILTON | D0016016 | 435 ISBILL RD | | 170 | 30 | Steel | 70 - 252 | | | No | Residential |
| 0105SE 2 | 06501518 | LINDSEY, ROBERT B | 09/24/1988 | 253 | 10 | 234 | Slotted | Good | 350500 | | 571 |
| HAMILTON | | LINDCREST CIRCL | | 235 | 174 | Steel | 234 - 253 | <u> </u> | 851730 | No. | Residential |
| 0105SE 2 | 06501613 | TRIPLETT, TERRY | 07/12/1989 | 600 | 20 | 209 | Open Hole | Good | 350500 | • | 571 |
| HAMILTON | | W ROAD | | 545 | 405 | Steel | 209 - 600 |) | 851730 | No | Residential |
| 0105SE 2 | 20004410 | FISHER, BEN | 01/03/2000 | 655 | 8 | 168 | Open Hole | Clear | | | 572 |
| HAMILTON | D0043178 | 4601 W RD | | 328 | 420 | Steel | 188 - 655 | 5 | · · · · · · · · · · · · · · · · · · · | Yes | Residential |
| 0105SE 2 | 91003307 | SWAFFORD, JACK | 08/24/1991 | 275 | . 6 | 114 | Open Hole | | | | 84 |
| HAMILTON | · | READ LAKE | | 135 | 40 | Steel | 114 - 275 | 5 | · · | No | Residential |
| 0105SE 2 | 98004033 | BROTHERS, ALEXIAN | 09/12/1998 | 300 | - 11 | 41 | Open Hole | | 350700 | Т | 68 |
| HAMILTON | D0032747 | MOUNTAIN CREEK | 11/30/1998 | 75 | 35 | Steel | 41 - 300 | 022496 | 851855 | No | Irrigation |
| 0105SE 3 | 91000977 | ALCO CHEMICAL | 10/04/1989 | 616 | 500 | . 40 | Open Hole | Unknown | | | 748 |
| HAMILTON | <u>.</u> | MUELER AVENUE | | 123 | 81 | Steel | <u>. </u> | | <u></u> | No | Industrial |
| 0105SE 3 | 93001607 | N A INDUSTRIES INC | 04/12/1993 | 210 | 100 | 164 | Open Hole | | | • | 748 |
| HAMILTON | | IN RIVERPORT IN | | | · - | Steel | 164 - 210 | 0 | | No | Industrial |
| 0105SE 3 | 93001608 | N A INDUSTRIES INC | 03/29/1993 | 600 | 1000 | 180 | Open Hole | Unknown | | | 748 |
| HAMILTON | <u> </u> | RIVERPORT IND P | | 118 | | Steel | 180 - 60 | 0 | | No | Industrial |

12/5/2005

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION - DIVISION OF WATER SUPPLY

| QUAD /:NTH COUNTY | WELL NUM REG NUM | OWNER'S NAME LOCATION ROAD | COMP DATE | TOT DEPTH AQ DEPTH | TOT YIELD STAT LEVEL | CSE DEPTH | WELL FINISH INTERVAL | WAT QUAL INSP NUMBER | LATITUDE LONGITUDE | A/C LOG | DRILLER USE |
|----------------------|----------------------|---|--------------------------|-------------------------|-------------------------|---------------|-------------------------|-------------------------|-----------------------|------------|--------------------|
| 0105SE 3 HAMILTON | 93001609 | NA INDUSTRIES INC RIVERPORT IND P | 04/23/1993 | 800 173 | 1500 | 189 Steel | Slotted 189 - 800 | | | No | 748 Industrial |
| 0105SE 3 HAMILTON | 94000122 D0007226 | COCA COLA BOTTLING AMNICOLA HIGHWA | 12/16/1993 | 700 _. 545 | 100 7283 | 44 Plastic | 44 - 700 | Unknown | | No | 665 Commercial |
| 0105SE 3 HAMILTON | 94000329 D0007226 | COCA-COLA BOTTLING AMNICOLA HIGHWA | 01/21/1994 | 700 545 | 200 72 | 95 Steel | Open Hole 95 - 560 | Unknown | | No | 665 Industrial |
| 0105SE 3 HAMILTON | 94000336 D0007228 | N A INDUSTRIES, INC IN RIVERPORT IN | 08/25/1993 | 200 | 2000 | 40 Steel | Open Hole 40 - 200 | Good | | No | 665 Industrial |
| 0105SE 3 HAMILTON | 99001213 D0037465 | CASE, JOEL GADD RD | 03/04/1999 | 228 65 | · 5 | 91 Steel | Open Hole 91 - 228 | | | No | 572 Residential |
| 0105SE 4 MARION | 20003751 D0048901 | MCLAUGHLIN, HAROLD ELDER MTN RD | 07/17/2000 | 302 115 | 6 90 | 41 Steel | • | Clear | | Yes | 571 Irrigation |
| 0105SE 4 MARION | 20003764 D0048906 | MCLAUGHLIN, HAROLD ELDER MTN RD | 07/12/2000 | 222 72 | 3 70 | 58 Steel | Open Hole 58 - 222 | Clear | | Yes | 571 Irrigation |
| 0105SE 4 | 20021969 D0058235 | HIXSON, DAVID 1880 CASH CANYON RD | 06/24/2002 | 208 138 | 9 | 125 Steel | Open Hole 156 - 208 | Clear | | Yes | 572 Residential |
| 0105SE 4 HAMILTON | 20040823 D0064911 | ROSSELL JR., RICHARD 1750 CASH CANYON RD | 03/18/2004 04/18/2005 | 180 70 | 2 | 41 Steel | Open Hole | Clear 0 044801 | 350416 852122 | F Yes | 750 Residential |
| 0105SE 4 | 91000886 | FROSTER, WILLIAM CASH CANYON RD | 01/18/1991 | 250 220 | 1 60 | 158 Steel | Open Hole 158 - 250 |) | | No | 84 Residential |
| 0105SE 4 | 95001796 D0011817 | JOHNSON, RANDY CASH CANYON | 05/10/1995 | 290 | 1 31 | 38 Steel | Open Hole 38 - 29 | | | No | 68 Residential |
| 0105SE 4 HAMILTON | 97002908 D0023747 | CITY OF CHATTANOOGA MOCCASIN BEND R | 06/20/1997 | 52 40 | 60 16 | 54 Steel | Slotted 32 - 4 | 8 | | No | 6 Other |
| 0105SE 4 HAMILTON | 98004031 D0032745 | JENKINS, STEVE CASH CANYON | 09/09/1998 | 125 108 | | 105 Steel | | 5 . | · | No | 68 Residential |



| QUAD / NTH COUNTY | WELL NUM REG NUM | OWNER'S NAME LOCATION ROAD | COMP DATE | | TOT YIELD STAT LEVEL | CSE DEPTH CSE TYPE | WELL FINISH INTERVAL | WAT QUAL INSP NUMBER | LATITUDE LONGITUDE | A/C LOG | DRILLER USE |
|-----------------------|----------------------|-----------------------------------|------------|------------|-------------------------|-----------------------|-------------------------|-------------------------|-----------------------|----------------------|--------------------|
| 0105SE 4 HAMILTON | 99004379 D0016024 | VINCENT, MILTON POLO FIELD 102 | 07/28/1999 | 280 | 2 | 35 Steel | Open Hole 35 - 280 | · | | No . | 665 Residential |
| 0105SE 4 HAMILTON | 99004380 D0016025 | VINCENT, MILTON POLO FIELD 102 | 07/29/1999 | 250 50 | 100 | 21 Steel | Open Hole 21 - 250 | Good | | No | 665 Residential |
| 0105SE 4 HAMILTON | 99005432 D0043326 | MASHBURN, PAUL OGRADY DR 818 | 09/09/1999 | 242 102 | 5 20 | 20 Steel | Open Hole 20 - 242 | Unknown | | No | 571 Irrigation |
| 0105SE, 5 HAMILTON | 06500814 | TN VALLEY AUTHORITY | 07/30/1980 | 147 70 | 150 | 70 Steel | - | | 350235 851909 | S: No | 748 Test |
| 0105SE 5 | 06500821 | TN VALLEY AUTHORITY | 02/23/1979 | 625 480 | 1500 | 60 | • | Good | 350233 851840 | S No | 748 Test |
| 0105SE 5 HAMILTON | 06500822 | TN VALLEY AUTHORITY | | 250 146 | 10 | 11 | • . | | 350232 851829 | S No | 748 Test |
| 0105SE 5 HAMILTON | 06500823 | TN VALLEY AUTHORITY | | 250 133 | 285 7 | 33 | - - | | 350232 851809 | S No | 748 Test |
| 0105SE 5 HAMILTON | 06500824 | TN VALLEY AUTHORITY | | 250 112 | 1500 · | 27 Plastic | | | 350235 851811 | S ⁻ No | 748 Test |
| 0105SE 5 | 06500825 | TN VALLEY AUTHORITY | 03/14/1979 | 207 149 | 285 5 | 35 | | | 350231 851810 | S No | 748 Test |
| 0105SE 5 HAMILTON | 06500843 | TN VALLEY AUTHORITY | 01/15/1980 | 75 | | 33 Steel | , - | | 350235 851840 | S No | 748 Other |
| 0105SE 5 HAMILTON | 06500844 | TN VALLEY AUTHORITY | 01/17/1980 | 74 | | | - | | 350233 851840 | S No | 748 Other |
| 0105SE 5 | 06500845 | TN VALLEY AUTHORITY | 01/17/1980 | 74 | | 35 Steel | | | 350233 851838 | S No | 748 Other |
| 0105SE 5 HAMILTON | 06500846 | TN VALLEY AUTHORITY | 01/18/1980 | 74 | | 29 Steel | | | 350238 851840 | S No | 748 Other |

| QUAD / NTH COUNTY | WELL NUM REG NUM | OWNER'S NAME LOCATION ROAD | COMP DATE | TOT DEPTH AQ DEPTH | TOT YIELD STAT LEVEL | CSE DEPTH CSE TYPE | WELL FINISH INTERVAL | WAT QUAL INSP NUMBER | LATITUDE LONGITUDE | A/C LOG | DRILLER USE |
|----------------------|----------------------|--------------------------------------|--------------------------|-----------------------|-------------------------|-----------------------|-------------------------|---------------------------------------|-----------------------|------------|--------------------|
| 0105SE 7 HAMILTON | 06501186 | CAMPBELL, RAY MAYDALE | 08/26/1985 | 572 158 | 4 140 | 160 Steel | Open Hole 160 - 572 | · · · · · · · · · · · · · · · · · · · | 350000 852000 | No | 572 Residential |
| 0105SE 7 HAMILTON | 06501243 | GOINS, BENNY CAROLYN LANE | ÷ | 571 400 | 1 225 | 265 Steel | Open Hole 265 - 571 | | 350000 852000 | No | 84 Residential |
| 0105SE 7 | 06501244 | MALONE, JIM WATAUGA | 04/30/1986 | 230 210 | 30 | 42 Steel | Open Hole 42 - 230 | · | 350000 852000 | No | 84 Heat Pump |
| 0105SE 7 HAMILTON | 06501391 | NABORS, ROBERT E HOLTSCLAW | 02/17/1987 | 343 343 | 100 20 | 42 Steel | Open Hole 42 - 343 | | 350000 852000 | No. | 84 Residential |
| 0105SE 7 HAMILTON | 20001517 D0016034 | REFLECTION RIDING 400 GARDEN RD | 03/20/2000 03/24/2001 | 225 50 | | 168 Steel | Open Hole 168 - 225 | Cloudy 030174 | 350027 852154 | F Yes | 665 Irrigation |
| 0105SE 7 HAMILTON | 96001175 D0014394 | NURSERY BROKERS MT VIEW DR 3206 | 03/05/1996 05/16/1996 | 185 45 | 5 30 | 21 Steel | • | 016677 | 350140 852152 | F No | 6 Residential |
| 0105SE 8 HAMILTON | 06500732 | ELEVENTH ST DEUP CO | 05/08/1979 06/23/1983 | 180 177 | 170 | 14 Steel | | | 350219 851808 | F No | 748 |
| 0105SE 8 HAMILTON | 06500815 | TN VALLEY AUTHORITY | 07/25/1980 | 147 113 | 50 | 75 Steel | · <u>.</u> . | | 350151 851914 | S No | 748 Test |
| 0105SE 8 HAMILTON | 06500816 | TN VALLEY AUTHORITY | 08/08/1980 | 147 108 | 217 | 80 Steel | - | Good | 350202 851916 | S No | 748 Test |
| 0105SE 8 | 06500817 | TN VALLEY AUTHORITY | 08/18/1980 | 168 108 | 500 | 79 Steel | | | 350222 851918 | S No | 748 Test |
| 0105SE 8 HAMILTON | 06500818 | TN VALLEY AUTHORITY | 08/18/1980 | 147 100 | 5 | 42 Steel | | | 350208 851856 | S No | 748 Test |
| 0105SE 8 HAMILTON | 06500819 | TN VALLEY AUTHORITY | 08/21/1980 | 147 86 | | 84 Steel | | | 350216 851917 | S No | 748 Test |
| 0105SE 8 HAMILTON | 06500820 | TN VALLEY AUTHORITY W 19TH STREET | 08/29/1980 | 147 54 | | 46 Steel | • | 7 | 350222 851936 | S No | 748 Test |



| QUAD / NTH | | OWNER'S NAME | COMP DATE | TOT DEPTH | | CSE DEPTH | WELL FINISH | | LATITUDE | A/C | DRILLER. |
|------------|----------|---------------------------------------|------------|-----------|------------|-----------|-------------|-------------|-----------|------|----------|
| COUNTY | REG NUM | LOCATION ROAD | INSP DATE | | STAT LEVEL | CSE TYPE | INTERVAL | INSP NUMBER | LONGITUDE | LOG | USE |
| 0105SE 8 | 06500826 | TN VALLEY AUTHORITY | 04/20/1979 | 124 | 1500 | 32 | | | 350220 | s | 748 |
| HAMILTON | | | | 51 | ٠ ـ | Steel | - | | 851750 | No | Test |
| 0105SE 8 | 06500827 | TN VALLEY AUTHORITY | 04/11/1979 | 144 | 300 | 91 | | | 350214 | S | 748 |
| HAMILTON | | · | | . 89 | 30 | | <u> </u> | | 851915 | No | Test |
| 0105SE 8 | 06500828 | TN VALLEY AUTHORITY | 04/12/1979 | 207 | 200 | 57 | | | 350128 | s | 748 |
| HAMILTON | | · · · · · · · · · · · · · · · · · · · | | 51 | 22 | | | · | 851815 | No | Test |
| 0105SE 8 | 06500829 | TN VALLEY AUTHORITY | 04/20/1979 | 207 | 400 | 30 | | | 350153 | S | 748 |
| HAMILTON | | | | 38 | | | - . | • | 851727 | No | Test |
| 0105SE 8 | 06500830 | TN VALLEY AUTHORITY | 05/08/1979 | 180 | 170 | | | | 350219 | S | 748 |
| HAMILTON | | • | | 177 | | | - | | 851808 | No | Test |
| 0105SE 8 | 06500831 | TN VALLEY AUTHORITY | 05/09/1979 | 207 | 80 | | - | - | 350229 | S·, | 748 |
| HAMILTON | | | | - 71 | | | <u>.</u> | | 851759 | No | Test |
| 0105SE 8 | 06500832 | TN VALLEY AUTHORITY | 07/19/1979 | . 148 | 107 | 45 | | | 350221 | s | 748 |
| HAMILTON | | | | 131 | | Steel | . · • | | 851800 | No | Test |
| 0105SE 8 | 06500833 | TN VALLEY AUTHORITY | 07/23/1979 | 148 | 65 | . 41 | | | 350225 | s | 748 |
| HAMILTON | · | | | 115 | | Steel | | | 851808 | No | Test |
| 0105SE 8 | 06500834 | TN VALLEY AUTHORITY | 07/24/1979 | . 73 | 80 | 49 | | | 350210 | s | 748 |
| HAMILTON | | • | | 64 | | Steel | - | | 851742 | No | Test |
| 0105SE 8 | 06500835 | TN VALLEY AUTHORITY | 07/25/1979 | 198 | 3 | 42 | | - | 350200 | s | 748 |
| HAMILTON | | | • | 40 | 14 | Steel | - | | 851994 | No | Test |
| 0105SE 8 | 06500836 | TN VALLEY AUTHORITY | 08/01/1979 | 248 | 200 | 81 | | | 350222 | S | 748 |
| HAMILTON | | | • | 60 | 24 | Steel | - | _ | 851857 | No | Test |
| 0105SE 8 | 06500837 | TN VALLEY AUTHORITY | 08/03/1979 | 166 | 200 | 115 | | | 350213 | s | 748 |
| HAMILTON | | | | 60 | 18 | Steel | · • | | 851909 | , No | Test |
| 0105SE 8 | 06500838 | TN VALLEY AUTHORITY | 08/07/1979 | 153 | 200 | 52 | | | 350205 | s | 748 |
| HAMILTON | | | • | 124 | 17 | | . • | | 851907 | No | Test |



| QUAD / NTH COUNTY | WELL NUM | OWNER'S NAME LOCATION ROAD | COMP DATE | TOT DEPTH AQ DEPTH | TOT YIELD STAT LEVEL | CSE DEPTH | WELL FINISH INTERVAL | WAT QUAL INSP NUMBER | LATITUDE LONGITUDE | A/C LOG | DRILLER USE |
|----------------------|----------|-------------------------------|------------|-----------------------|-------------------------|-----------|-------------------------|-------------------------|-----------------------|------------|----------------|
| 0105SE 8 | 06500839 | TN VALLEY AUTHORITY | 08/07/1979 | 148 | 400 | 88 | | | 350223 | S | 748 |
| HAMILTON | | | | 138 | | Plastic | - | | 851908 | No | Test |
| 0105SE 8 | 06500840 | TN VALLEY AUTHORITY | 07/23/1980 | 147 | 500 | 54 | | | 350208 | s | 748 |
| HAMILTON | | | | 63 | | Steel | - | | 851853 | No | Test |
| 0105SE 8 | 06500842 | TN VALLEY AUTHORITY | | 435 | | 225 | | | 350214 | s | 740 |
| HAMILTON | | | | | | Steel | - | | 851913 | No | Other |
| 0105SE 8 | 06501180 | WHEELAM FOUNDY | 04/11/1985 | 61 | | 61 | Slotted | | 350000 | | 84 |
| HAMILTON | | BROAD ST | | 56 | • | Plastic | 51 - 61 | | 851730 | No | Monitor |
| 0105SE 8 | 20023949 | WDEF TV | 10/08/2002 | 60 | | | | | | | 572 |
| HAMILTON | | BROAD ST | | , · | 23 | Steel | - | , | | No | |
| 0105SE 8 | 97003259 | SOUTHERN CELLULOSE | 01/20/1997 | 300 | 100 | 20 | Open Hole | Sulphur | | | 665 |
| HAMILTON | D0016006 | CENTRAL | • | | , . | Steel | 20 - 300 |) | | No | Commercial |
| 0105SE 9 | 06500102 | JOHNSON TRUCK STOP | 10/12/1966 | 241 | . 60 | | | Good | 3501.17 | s | 84 |
| HAMILTON | | | | 200 | 20 | | • | | 851726 | No | Commercial |
| 0105SE 9 | 98001762 | VETERANS NATIONAL CE | 05/27/1998 | 202 | - 80 | .42 | Open Hole | Good | 350200 | F | 571 |
| HAMILTON | D0027705 | CENTRAL AVE | 09/16/1998 | 59 | 12 | Steel | 42 - 202 | 2 022500 | 851732 | No | Irrigation |

Reference 5

US Census Bureau State and County QuickFacts for Chattanooga, Tennessee People QuickFacts - Population, 2000

State & County QuickFacts

•

Chattanooga (city), Tennessee

| People QuickFacts | Chattanooga | Tennessee |
|---|-------------|-----------|
| Population, 2003 estimate | 154,887 | 5,841,748 |
| Population, percent change, April 1, 2000 to July 1, 2003 | -0.5% | 2.7% |
| Population, 2000 | 155,554 | 5,689,283 |
| Population, percent change, 1990 to 2000 | 1.8% | 16.7% |
| Persons under 5 years old, percent, 2000 | 6.1% | 6.6% |
| Persons under 18 years old, percent, 2000 | 22.4% | 24.6% |
| Persons 65 years old and over, percent, 2000 | 15.2% | 12.4% |
| Female persons, percent, 2000 | 52.8% | 51.3% |
| White persons, percent, 2000 (a) | 59.7% | 80.2% |
| Black or African American persons, percent, 2000 (a) | 36.1% | 16.4% |
| American Indian and Alaska Native persons, percent, 2000 (a) | 0.3% | 0.3% |
| Asian persons, percent, 2000 (a) | 1.5% | 1.0% |
| Native Hawaiian and Other Pacific Islander, percent, 2000 (a) | 0.1% | Z |
| Persons reporting some other race, percent, 2000 (a) | 1.0% | 1.0% |
| Persons reporting two or more races, percent, 2000 | 1.3% | 1.1% |
| Persons of Hispanic or Latino origin, percent, 2000 (b) | 2.1% | 2.2% |
| Living in same house in 1995 and 2000', pct age 5+, 2000 | 52.1% | 53.9% |
| Foreign born persons, percent, 2000 | 3.4% | 2.8% |
| Language other than English spoken at home, pct age 5+, 2000 | 5.6% | 4.8% |
| High school graduates, percent of persons age 25+, 2000 | 77.6% | 75.9% |
| Bachelor's degree or higher, pct of persons age 25+, 2000 | 21.5% | 19.6% |
| Mean travel time to work (minutes), workers age 16+, 2000 | 19.8 | 24.5 |
| Housing units, 2000 | 72,108 | 2,439,443 |
| Homeownership rate, 2000 | 54.9% | 69.9% |
| Median value of owner-occupied housing units, 2000 | \$83,500 | \$93,000 |
| Households, 2000 | 65,499 | 2,232,905 |
| Persons per household, 2000 | 2.29 | 2.48 |
| Median household income, 1999 | \$32,006 | \$36,360 |

| Per capita money income, 1999 | \$19,689 | \$19,393 |
|--|-------------|------------|
| Persons below poverty, percent, 1999 | 17.9% | 13.5% |
| Business QuickFacts | Chattanooga | Tennessee |
| Manufacturers shipments, 1997 (\$1000) | 4,091,403 | 98,503,080 |
| Wholesale trade sales, 1997 (\$1000) | 3,688,758 | 82,626,370 |
| Retail sales, 1997 (\$1000) | 2,707,050 | 50,813,221 |
| Retail sales per capita, 1997 | \$18,115 | \$9,448 |
| Accomodation and foodservices sales, 1997 (\$1000) | 366,660 | 6,790,159 |
| Total number of firms, 1997 | 13,958 | 415,934 |
| Minority-owned firms, percent of total, 1997 | 9.2% | 7.8% |
| Women-owned firms, percent of total, 1997 | 22.1% | 24.0% |
| Geography QuickFacts | Chattanooga | Tennessee |
| Land area, 2000 (square miles) | 135 | 41,217 |
| Persons per square mile, 2000 | 1,150.5 | 138.0 |
| FIPS Code | 14000 | 47 |
| Counties | Hamilton | · · |
| | County | |
| | Marion | |
| | County | |

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and

Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments

Last Revised: Wednesday, 16-Nov-2005 10:07:54 EST

Census Bureau Links:

⁽a) Includes persons reporting only one race.(b) Hispanics may be of any race, so also are included in applicable race categories.

FN: Footnote on this item for this area in place of data NA: Not available

D: Suppressed to avoid disclosure of confidential information

X: Not applicable

S: Suppressed; does not meet publication standards

Z: Value greater than zero but less than half unit of measure shown

F: Fewer than 100 firms